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MECADEZ CORE TECHNOLOGIES PRIVATE LIMITED  
PROJECT MANAGEMENT & CONSULTANCY

**Test Report**  
**Stability of Mix**

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Project Name</b> | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| <b>Client</b>       | Executive Engineer, Project Division Yalahanka                     |
| <b>Job No</b>       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| <b>Mix Type</b>     | Bituminous Concrete (BC)                                           |
| <b>Contractor</b>   | M/s KRIDL                                                          |
| <b>Test Method</b>  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| <b>Location</b>     | Bay                                                                |
| <b>Material</b>     | Bituminous Concrete mix                                            |
| <b>Sample No</b>    | 1                                                                  |
| <b>Date</b>         | 5-Jun-2018                                                         |

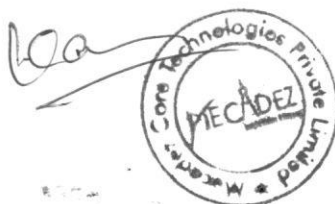
| Sl. No. | Description                                                | Unit | Test 1 | Requirements as per MORT&H |
|---------|------------------------------------------------------------|------|--------|----------------------------|
| 1       | Marshal Stability                                          | KN   | 9.6    | 9 KN (min)                 |
| 2       | Marshal Flow                                               | mm   | 3.52   | 2 - 4 mm                   |
| 3       | Percent of Air Voids in mix                                | %    | 4.3    | 3 - 6 %                    |
| 4       | Percent of Voids in Mineral Aggregates filled with Bitumen | %    | 72     | 65 - 75 %                  |
| 5       | Density                                                    | g/cc | 2.22   | 2.22 g/cc                  |

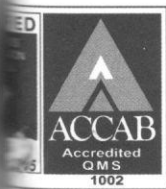
**Note:**

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- Any query regarding the report must be reported immediately.

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**Test Report**  
**Stability of Mix**

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Project Name</b> | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| <b>Client</b>       | Executive Engineer, Project Division Yalahanka                     |
| <b>Job No</b>       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| <b>Mix Type</b>     | Bituminous Concrete (BC)                                           |
| <b>Contractor</b>   | M/s KRIDL                                                          |
| <b>Test Method</b>  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| <b>Location</b>     | Bay                                                                |
| <b>Material</b>     | Bituminous Concrete mix                                            |
| <b>Sample No</b>    | 2                                                                  |
| <b>Date</b>         | 5-Jun-2018                                                         |

| Sl. No. | Description                                                | Unit | Test 1 | Requirements as per MORT&H |
|---------|------------------------------------------------------------|------|--------|----------------------------|
| 1       | Marshal Stability                                          | KN   | 9.6    | 9 KN (min)                 |
| 2       | Marshal Flow                                               | mm   | 3.4    | 2 - 4 mm                   |
| 3       | Percent of Air Voids in mix                                | %    | 4.7    | 3 - 6 %                    |
| 4       | Percent of Voids in Mineral Aggregates filled with Bitumen | %    | 73     | 65 - 75 %                  |
| 5       | Density                                                    | g/cc | 2.23   | 2.22 g/cc                  |

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PROJECT MANAGEMENT & CONSULTANCY SERVICES

**Test Report**  
**Stability of Mix**

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Project Name</b> | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| <b>Client</b>       | Executive Engineer, Project Division Yalahanka                     |
| <b>Job No</b>       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| <b>Mix Type</b>     | Bituminous Concrete (BC)                                           |
| <b>Contractor</b>   | M/s KRIDL                                                          |
| <b>Test Method</b>  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| <b>Location</b>     | Bay                                                                |
| <b>Material</b>     | Bituminous Concrete mix                                            |
| <b>Sample No</b>    | 3                                                                  |
| <b>Date</b>         | 5-Jun-2018                                                         |

| Sl. No. | Description                                                | Unit | Test 1 | Requirements as per MORT&H |
|---------|------------------------------------------------------------|------|--------|----------------------------|
| 1       | Marshal Stability                                          | KN   | 9.3    | 9 KN (min)                 |
| 2       | Marshal Flow                                               | mm   | 3.43   | 2 - 4 mm                   |
| 3       | Percent of Air Voids in mix                                | %    | 4.6    | 3 - 6 %                    |
| 4       | Percent of Voids in Mineral Aggregates filled with Bitumen | %    | 75     | 65 - 75 %                  |
| 5       | Density                                                    | g/cc | 2.22   | 2.22 g/cc                  |

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**Test Report**  
**Stability of Mix**

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Project Name</b> | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| <b>Client</b>       | Executive Engineer, Project Division Yalahanka                     |
| <b>Job No</b>       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| <b>Mix Type</b>     | Bituminous Concrete (BC)                                           |
| <b>Contractor</b>   | M/s KRIDL                                                          |
| <b>Test Method</b>  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| <b>Location</b>     | Bay                                                                |
| <b>Material</b>     | Bituminous Concrete mix                                            |
| <b>Sample No</b>    | 4                                                                  |
| <b>Date</b>         | 6-Jun-2018                                                         |

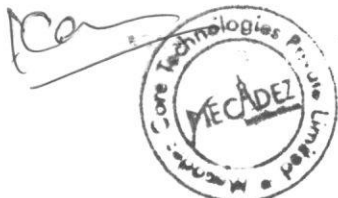
| Sl. No. | Description                                                | Unit | Test 1 | Requirements as per MORT&H |
|---------|------------------------------------------------------------|------|--------|----------------------------|
| 1       | Marshal Stability                                          | KN   | 9.6    | 9 KN (min)                 |
| 2       | Marshal Flow                                               | mm   | 3.5    | 2 - 4 mm                   |
| 3       | Percent of Air Voids in mix                                | %    | 4.6    | 3 - 6 %                    |
| 4       | Percent of Voids in Mineral Aggregates filled with Bitumen | %    | 71.35  | 65 - 75 %                  |
| 5       | Density                                                    | g/cc | 2.23   | 2.22 g/cc                  |

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**Test Report**  
**Stability of Mix**

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Project Name</b> | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| <b>Client</b>       | Executive Engineer, Project Division Yalahanka                     |
| <b>Job No</b>       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| <b>Mix Type</b>     | Bituminous Concrete (BC)                                           |
| <b>Contractor</b>   | M/s KRIDL                                                          |
| <b>Test Method</b>  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| <b>Location</b>     | Bay                                                                |
| <b>Material</b>     | Bituminous Concrete mix                                            |
| <b>Sample No</b>    | 5                                                                  |
| <b>Date</b>         | 6-Jun-2018                                                         |

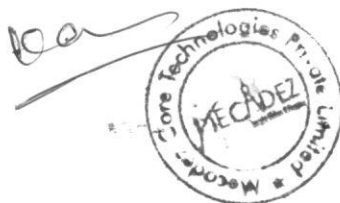
| Sl. No. | Description                                                | Unit | Test 1 | Requirements as per MORT&H |
|---------|------------------------------------------------------------|------|--------|----------------------------|
| 1       | Marshal Stability                                          | KN   | 9.6    | 9 KN (min)                 |
| 2       | Marshal Flow                                               | mm   | 3.4    | 2 - 4 mm                   |
| 3       | Percent of Air Voids in mix                                | %    | 4.85   | 3 - 6 %                    |
| 4       | Percent of Voids in Mineral Aggregates filled with Bitumen | %    | 70.1   | 65 - 75 %                  |
| 5       | Density                                                    | g/cc | 2.21   | 2.22 g/cc                  |

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**Test Report**  
**Stability of Mix**

|                     |                                                                    |
|---------------------|--------------------------------------------------------------------|
| <b>Project Name</b> | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| <b>Client</b>       | Executive Engineer, Project Division Yalahanka                     |
| <b>Job No</b>       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| <b>Mix Type</b>     | Bituminous Concrete (BC)                                           |
| <b>Contractor</b>   | M/s KRIDL                                                          |
| <b>Test Method</b>  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| <b>Location</b>     | Bay                                                                |
| <b>Material</b>     | Bituminous Concrete mix                                            |
| <b>Sample No</b>    | 6                                                                  |
| <b>Date</b>         | 6-Jun-2018                                                         |

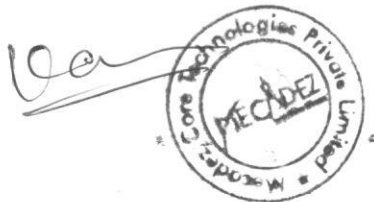
| Sl. No. | Description                                                | Unit | Test 1 | Requirements as per MORT&H |
|---------|------------------------------------------------------------|------|--------|----------------------------|
| 1       | Marshal Stability                                          | KN   | 9.8    | 9 KN (min)                 |
| 2       | Marshal Flow                                               | mm   | 3.2    | 2 - 4 mm                   |
| 3       | Percent of Air Voids in mix                                | %    | 4.45   | 3 - 6 %                    |
| 4       | Percent of Voids in Mineral Aggregates filled with Bitumen | %    | 71.5   | 65 - 75 %                  |
| 5       | Density                                                    | g/cc | 2.22   | 2.22 g/cc                  |

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PROJECT MANAGEMENT & CONSULTANCY SERVICES

**Test Report**  
**Binder Content and Mix Gradation**

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| Project Name | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| Client       | Executive Engineer, Project Division Yalahanka                     |
| Job No       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| Mix Type     | Bituminous Concrete (BC)                                           |
| Contractor   | M/s KRIDL                                                          |
| Test Method  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| Location     | Bay                                                                |
| Material     | Bituminous Concrete mix                                            |
| Sample No    | 1                                                                  |
| Date         | 5-Jun-2018                                                         |

| Sl. No. | Description                                                                  | Unit | Computation                                       | Test Result |
|---------|------------------------------------------------------------------------------|------|---------------------------------------------------|-------------|
| 1       | Weight of Empty bowl before Extraction (E)                                   | gm   | E <sub>b</sub>                                    | 1080        |
| 2       | Weight of bowl + Sample before extraction (w <sub>b</sub> )                  | gm   | w <sub>sb</sub>                                   | 1690        |
| 3       | Weight of Sample taken for the test (S <sub>b</sub> )                        | gm   | S <sub>b</sub> = w <sub>sb</sub> - E <sub>b</sub> | 610         |
| 4       | Weight of bowl + Sample after extraction (w <sub>a</sub> )                   | gm   | w <sub>sa</sub>                                   | 1653        |
| 5       | Weight of Sample after extraction (i.e. washed aggregates) (S <sub>a</sub> ) | gm   | S <sub>a</sub> = w <sub>sa</sub> - E <sub>b</sub> | 573         |
| 6       | Weight of Filter paper before extraction (F <sub>b</sub> )                   | gm   | F <sub>b</sub>                                    | 2           |
| 7       | Weight of Filter paper after extraction (F <sub>a</sub> )                    | gm   | F <sub>a</sub>                                    | 4           |
| 8       | Weight of filler on filter paper (F <sub>d</sub> )                           | gm   | F <sub>d</sub> = F <sub>b</sub> - F <sub>a</sub>  | 2           |
| 9       | Weight of Bitumen without considering Filter paper (W <sub>b</sub> )         | gm   | W <sub>b</sub>                                    | 35          |
| 10      | Weight of the Bitumen with considering Filter paper (W <sub>a</sub> )        | gm   | W <sub>a</sub> = W <sub>b</sub> - F <sub>d</sub>  | 33          |
| 11      | Percentage of the Bitumen (i.e. Binder Content) (% <sub>b</sub> )            | (%)  | W <sub>a</sub> / S <sub>b</sub> X 100             | 5.41        |

| Sl. No. | I.S. Sieve size (mm) | Weight Retained (gm) | Percentage of weight Retained (%) | Cumulative Percentage of weight retained (%) | Cumulative % of Passing |                                | Remarks                                                                       |
|---------|----------------------|----------------------|-----------------------------------|----------------------------------------------|-------------------------|--------------------------------|-------------------------------------------------------------------------------|
|         |                      |                      |                                   |                                              | Test Result             | Gradation Limits as per MORT&H |                                                                               |
| 1       | 19.00                | 0.00                 | 0.00                              | 0.00                                         | 100.00                  | 100.00                         | Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete |
| 2       | 13.20                | 675.00               | 16.88                             | 16.88                                        | 83.13                   | 72-100                         |                                                                               |
| 3       | 9.50                 | 433.00               | 10.83                             | 27.70                                        | 72.30                   | 70-88                          |                                                                               |
| 4       | 4.75                 | 236.00               | 5.90                              | 33.60                                        | 66.40                   | 53-71                          |                                                                               |
| 5       | 2.36                 | 476.00               | 11.90                             | 45.50                                        | 54.50                   | 42-58                          |                                                                               |
| 6       | 1.18                 | 340.00               | 8.50                              | 54.00                                        | 46.00                   | 34-48                          |                                                                               |
| 7       | 0.60                 | 435.00               | 10.88                             | 64.88                                        | 35.13                   | 26-38                          |                                                                               |
| 8       | 0.30                 | 430.00               | 10.75                             | 75.63                                        | 24.38                   | 18-28                          |                                                                               |
| 9       | 0.15                 | 378.00               | 9.45                              | 85.08                                        | 14.93                   | 12-20                          |                                                                               |
| 10      | 0.08                 | 360.00               | 9.00                              | 94.08                                        | 5.93                    | (4-10)                         |                                                                               |

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**Test Report**  
**Binder Content and Mix Gradation**

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| Project Name | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| Client       | Executive Engineer, Project Division Yalahanka                     |
| Job No       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| Mix Type     | Bituminous Concrete (BC)                                           |
| Contractor   | M/s KRIDL                                                          |
| Test Method  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| Location     | Bay                                                                |
| Material     | Bituminous Concrete mix                                            |
| Sample No    | 2                                                                  |
| Date         | 5-Jun-2018                                                         |

| Sl. No. | Description                                                                  | Unit | Computation                                       | Test Result |
|---------|------------------------------------------------------------------------------|------|---------------------------------------------------|-------------|
| 1       | Weight of Empty bowl before Extraction (E)                                   | gm   | E <sub>b</sub>                                    | 1080        |
| 2       | Weight of bowl + Sample before extraction (w <sub>b</sub> )                  | gm   | w <sub>sb</sub>                                   | 1767        |
| 3       | Weight of Sample taken for the test (S <sub>b</sub> )                        | gm   | S <sub>b</sub> = w <sub>sb</sub> - E <sub>b</sub> | 687         |
| 4       | Weight of bowl + Sample after extraction (w <sub>a</sub> )                   | gm   | w <sub>sa</sub>                                   | 1727        |
| 5       | Weight of Sample after extraction (i.e. washed aggregates) (S <sub>a</sub> ) | gm   | S <sub>a</sub> = w <sub>sa</sub> - E <sub>b</sub> | 647         |
| 6       | Weight of Filter paper before extraction (F <sub>b</sub> )                   | gm   | F <sub>b</sub>                                    | 2           |
| 7       | Weight of Filter paper after extraction (F <sub>a</sub> )                    | gm   | F <sub>a</sub>                                    | 4           |
| 8       | Weight of filler on filter paper (F <sub>d</sub> )                           | gm   | F <sub>d</sub> = F <sub>b</sub> - F <sub>a</sub>  | 2           |
| 9       | Weight of Bitumen without considering Filter paper (W <sub>b</sub> )         | gm   | W <sub>b</sub>                                    | 38          |
| 10      | Weight of the Bitumen with considering Filter paper (W <sub>a</sub> )        | gm   | W <sub>a</sub> = w <sub>b</sub> - F <sub>d</sub>  | 36          |
| 11      | Percentage of the Bitumen (i.e. Binder Content) (% <sub>b</sub> )            | (%)  | W <sub>a</sub> / S <sub>b</sub> X 100             | 5.24        |

| Sl. No. | I.S. Sieve size (mm) | Weight Retained (gm) | Percentage of weight Retained (%) | Cumulative Percentage of weight retained (%) | Cumulative % of Passing |                                | Remarks                                                                       |
|---------|----------------------|----------------------|-----------------------------------|----------------------------------------------|-------------------------|--------------------------------|-------------------------------------------------------------------------------|
|         |                      |                      |                                   |                                              | Test Result             | Gradation Limits as per MORT&H |                                                                               |
| 1       | 19.00                | 0.00                 | 0.00                              | 0.00                                         | 100.00                  | 100.00                         | Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete |
| 2       | 13.20                | 675.00               | 16.88                             | 16.88                                        | 83.13                   | 72-100                         |                                                                               |
| 3       | 9.50                 | 433.00               | 10.83                             | 27.70                                        | 72.30                   | 70-88                          |                                                                               |
| 4       | 4.75                 | 236.00               | 5.90                              | 33.60                                        | 66.40                   | 53-71                          |                                                                               |
| 5       | 2.36                 | 476.00               | 11.90                             | 45.50                                        | 54.50                   | 42-58                          |                                                                               |
| 6       | 1.18                 | 340.00               | 8.50                              | 54.00                                        | 46.00                   | 34-48                          |                                                                               |
| 7       | 0.60                 | 435.00               | 10.88                             | 64.88                                        | 35.13                   | 26-38                          |                                                                               |
| 8       | 0.30                 | 430.00               | 10.75                             | 75.63                                        | 24.38                   | 18-28                          |                                                                               |
| 9       | 0.15                 | 378.00               | 9.45                              | 85.08                                        | 14.93                   | 12-20                          |                                                                               |
| 10      | 0.08                 | 360.00               | 9.00                              | 94.08                                        | 5.93                    | (4-10)                         |                                                                               |

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**Test Report**  
**Binder Content and Mix Gradation**

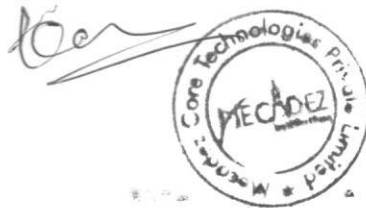
|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| Project Name | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| Client       | Executive Engineer, Project Division Yalahanka                     |
| Job No       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| Mix Type     | Bituminous Concrete (BC)                                           |
| Contractor   | M/s KRIDL                                                          |
| Test Method  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| Location     | Bay                                                                |
| Material     | Bituminous Concrete mix                                            |
| Sample No    | 3                                                                  |
| Date         | 6-Jun-2018                                                         |

| Sl. No. | Description                                                                  | Unit | Computation                                       | Test Result |
|---------|------------------------------------------------------------------------------|------|---------------------------------------------------|-------------|
| 1       | Weight of Empty bowl before Extraction (E)                                   | gm   | E <sub>b</sub>                                    | 1080        |
| 2       | Weight of bowl + Sample before extraction (w <sub>b</sub> )                  | gm   | w <sub>sb</sub>                                   | 1751        |
| 3       | Weight of Sample taken for the test (S <sub>b</sub> )                        | gm   | S <sub>b</sub> = w <sub>sb</sub> - E <sub>b</sub> | 671         |
| 4       | Weight of bowl + Sample after extraction (w <sub>a</sub> )                   | gm   | w <sub>sa</sub>                                   | 1711        |
| 5       | Weight of Sample after extraction (i.e. washed aggregates) (S <sub>a</sub> ) | gm   | S <sub>a</sub> = w <sub>sa</sub> - E <sub>b</sub> | 631         |
| 6       | Weight of Filter paper before extraction (F <sub>b</sub> )                   | gm   | F <sub>b</sub>                                    | 2           |
| 7       | Weight of Filter paper after extraction (F <sub>a</sub> )                    | gm   | F <sub>a</sub>                                    | 4           |
| 8       | Weight of filler on filter paper (F <sub>d</sub> )                           | gm   | F <sub>d</sub> = F <sub>b</sub> - F <sub>a</sub>  | 2           |
| 9       | Weight of Bitumen without considering Filter paper (W <sub>b</sub> )         | gm   | W <sub>b</sub>                                    | 38          |
| 10      | Weight of the Bitumen with considering Filter paper (W <sub>a</sub> )        | gm   | W <sub>a</sub> = w <sub>b</sub> - F <sub>d</sub>  | 36          |
| 11      | Percentage of the Bitumen (i.e. Binder Content) (% <sub>b</sub> )            | (%)  | W <sub>a</sub> / S <sub>b</sub> × 100             | 5.37        |

| Sl. No. | I.S. Sieve size (mm) | Weight Retained (gm) | Percentage of weight Retained (%) | Cumulative Percentage of weight retained (%) | Cumulative % of Passing |                                | Remarks                                                                       |
|---------|----------------------|----------------------|-----------------------------------|----------------------------------------------|-------------------------|--------------------------------|-------------------------------------------------------------------------------|
|         |                      |                      |                                   |                                              | Test Result             | Gradation Limits as per MORT&H |                                                                               |
| 1       | 19.00                | 0.00                 | 0.00                              | 0.00                                         | 100.00                  | 100.00                         | Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete |
| 2       | 13.20                | 690.00               | 17.25                             | 17.25                                        | 82.75                   | 72-100                         |                                                                               |
| 3       | 9.50                 | 405.00               | 10.13                             | 27.38                                        | 72.63                   | 70-88                          |                                                                               |
| 4       | 4.75                 | 225.00               | 5.63                              | 33.00                                        | 67.00                   | 53-71                          |                                                                               |
| 5       | 2.36                 | 470.00               | 11.75                             | 44.75                                        | 55.25                   | 42-58                          |                                                                               |
| 6       | 1.18                 | 300.00               | 7.50                              | 52.25                                        | 47.75                   | 34-48                          |                                                                               |
| 7       | 0.60                 | 400.00               | 10.00                             | 62.25                                        | 37.75                   | 26-38                          |                                                                               |
| 8       | 0.30                 | 450.00               | 11.25                             | 73.50                                        | 26.50                   | 18-28                          |                                                                               |
| 9       | 0.15                 | 365.00               | 9.13                              | 82.63                                        | 17.38                   | 12-20                          |                                                                               |
| 10      | 0.08                 | 470.00               | 11.75                             | 94.38                                        | 5.63                    | (4-10)                         |                                                                               |

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**Test Report**  
**Binder Content and Mix Gradation**

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| Project Name | Improvements to roads and drains at Prakruthi Layout in Ward No.05 |
| Client       | Executive Engineer, Project Division Yalahanka                     |
| Job No       | MCTPL/BBMP/Project-YNK/QR/2017-2018/02                             |
| Mix Type     | Bituminous Concrete (BC)                                           |
| Contractor   | M/s KRIDL                                                          |
| Test Method  | Specification for Road & Bridge Works, MORT&H, Revision V.         |
| Location     | Bay                                                                |
| Material     | Bituminous Concrete mix                                            |
| Sample No    | 4                                                                  |
| Date         | 6-Jun-2018                                                         |

| Sl. No. | Description                                                                  | Unit | Computation                                       | Test Result |
|---------|------------------------------------------------------------------------------|------|---------------------------------------------------|-------------|
| 1       | Weight of Empty bowl before Extraction (E)                                   | gm   | E <sub>b</sub>                                    | 1080        |
| 2       | Weight of bowl + Sample before extraction (w <sub>b</sub> )                  | gm   | w <sub>sb</sub>                                   | 1798        |
| 3       | Weight of Sample taken for the test (S <sub>b</sub> )                        | gm   | S <sub>b</sub> = w <sub>sb</sub> - E <sub>b</sub> | 718         |
| 4       | Weight of bowl + Sample after extraction (w <sub>a</sub> )                   | gm   | w <sub>sa</sub>                                   | 1755        |
| 5       | Weight of Sample after extraction (i.e. washed aggregates) (S <sub>a</sub> ) | gm   | S <sub>a</sub> = w <sub>sa</sub> - E <sub>b</sub> | 675         |
| 6       | Weight of Filter paper before extraction (F <sub>b</sub> )                   | gm   | F <sub>b</sub>                                    | 2           |
| 7       | Weight of Filter paper after extraction (F <sub>a</sub> )                    | gm   | F <sub>a</sub>                                    | 4           |
| 8       | Weight of filler on filter paper (F <sub>d</sub> )                           | gm   | F <sub>d</sub> = F <sub>b</sub> - F <sub>a</sub>  | 2           |
| 9       | Weight of Bitumen without considering Filter paper (W <sub>b</sub> )         | gm   | W <sub>b</sub>                                    | 41          |
| 10      | Weight of the Bitumen with considering Filter paper (W <sub>a</sub> )        | gm   | W <sub>a</sub> = w <sub>b</sub> - F <sub>d</sub>  | 39          |
| 11      | Percentage of the Bitumen (i.e. Binder Content) (% <sub>b</sub> )            | (%)  | W <sub>a</sub> / S <sub>b</sub> X 100             | 5.43        |

| Sl. No. | I.S. Sieve size (mm) | Weight Retained (gm) | Percentage of weight Retained (%) | Cumulative Percentage of weight retained (%) | Cumulative % of Passing |                                | Remarks                                                                       |
|---------|----------------------|----------------------|-----------------------------------|----------------------------------------------|-------------------------|--------------------------------|-------------------------------------------------------------------------------|
|         |                      |                      |                                   |                                              | Test Result             | Gradation Limits as per MORT&H |                                                                               |
| 1       | 19.00                | 0.00                 | 0.00                              | 0.00                                         | 100.00                  | 100.00                         | Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete |
| 2       | 13.20                | 667.00               | 16.68                             | 16.68                                        | 83.33                   | 72-100                         |                                                                               |
| 3       | 9.50                 | 416.00               | 10.40                             | 27.08                                        | 72.93                   | 70-88                          |                                                                               |
| 4       | 4.75                 | 233.00               | 5.83                              | 32.90                                        | 67.10                   | 53-71                          |                                                                               |
| 5       | 2.36                 | 490.00               | 12.25                             | 45.15                                        | 54.85                   | 42-58                          |                                                                               |
| 6       | 1.18                 | 314.00               | 7.85                              | 53.00                                        | 47.00                   | 34-48                          |                                                                               |
| 7       | 0.60                 | 419.00               | 10.48                             | 63.48                                        | 36.53                   | 26-38                          |                                                                               |
| 8       | 0.30                 | 382.00               | 9.55                              | 73.03                                        | 26.98                   | 18-28                          |                                                                               |
| 9       | 0.15                 | 380.00               | 9.50                              | 82.53                                        | 17.48                   | 12-20                          |                                                                               |
| 10      | 0.08                 | 370.00               | 9.25                              | 91.78                                        | 8.22                    | (4-10)                         |                                                                               |

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